

CLAIMS

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1. Light weight seating furniture construction, in particular with the appearance of a sphere-shape or of an other three-dimensional geometrical shape, like a cylinder, with memory effect, in other words that after the removal of the seating load (caused by a sitting person) which results into a deformation, the seating furniture construction completely regains its original shape, comprising:
 - a. a shell construction which is deformable under seating load, which construction consists of geometrically shaped air permeable shell shaping sheet elements manufactured from porous natural or plastic material having the property to spring back in its original shape, whereby the shell construction comprises the property of a flexible skeleton structure with memory effect; whereby the external surface of the shell construction may be provided with a desired decorative external surface, like a cover or a printing, and furthermore the shell construction is provided internally with a hollow internal space which is suitable for partially filling up with
 - b. a number of relatively small shape-retaining particles for support and advancement of the temporary shape-retaining property of the shell construction once a person is seated thereupon, which particles are manufactured from natural or plastic material (like polystyrene foam particles) and which particles are optionally packed in a suitable air permeable cover.
2. Light weight seating furniture construction with memory effect according to claim 1, characterized in that the flexible skeleton structure is obtained with a plurality of geometrically shaped air permeable sheet elements together shaping the shell, which are mutually interconnected into a three-dimensional geometrical shell by means of adhesive means.

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3. Light weight seating furniture construction with memory effect according to claim 1, characterized in that the high memory effect operation of the flexible structure is obtained by fully integrating the suitable different skeleton segments into the shell construction as three-dimensionally shaped geometrical segments, which are manufactured from e.g. plastic material

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4. Light weight seating furniture construction according to any one of the claims 1 -2, characterized in that the geometrically shaped three-dimensional shell elements of the shell construction are provided with a geometrically polygonal shape like a triangle, square, quadrilateral, pentagon, hexagon, etc.

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5. Light weight seating furniture construction according to any one of the claims 1 -4, characterized in that the shell construction has the appearance of an imperfect sphere-shape of a tetrahedron, cube, octahedron, dodecahedron, icosahedron, truncated tetrahedron, cuboctahedron, truncated cube, truncated octahedron, small rhombicuboctahedron, great rhombicuboctahedron, snub cube, icosidodecahedron, truncated dodecahedron, truncated icosahedron, small or great rhombicosidodecahedron, etc. or of a combined (hybrid) shape thereof.

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6. Light weight seating furniture obtained by using the spherical light weight seating furniture construction according to one or more of the preceding claims 1-5, characterized by the shape of a great playing bal or as a celestial body (globe, moon, etc.) and/or providing on its external surface one or more images, colour area's, advertisements, logos, etc.

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7. Light weight seating furniture obtained by using the spherical light weight seating furniture construction according to one or more of the preceding claims 1-6, characterized by geometrically shaped air permeable shell shaping sheet elements having an external diameter between 50 and 200 cm and a wall thickness of at least 3 to 20 cm.